

JUL

February 4, 1958

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Dear Jim:

To yours of the 30th. The arguments about Mulford East End do sound unbeatable. That is too bad. I'll just follow along with your suggestions now, of giving the major specifications.

I am enclosing one of the penultimate plans for Medical Genetics here; it includes most of the design features; which is not to see it ought to be emulated foot by foot. The basic furniture units are 31-- , a 31" high work bench with open shelving on the wall; built in illuminator ; and a set of drawers and cabinets not too unconventional. The 37-- units are essentially chemical bench. Room 124 is a fair approximation to what I might call a basic unit; multiply this by 3 or $3\frac{1}{2}$ and you have the basic scope. I have in mind a group of 12 active workers (including Esther & myself, postdoctoral fellows, graduate students and technical assistants) plus some casual workers and perhaps itinerant students. The plan calls for about 16 bench spaces in the core labs, to allow some flexibility; e.g., when I am doing some micromanipulations, I may well need 2 or three units.

In my last letter, I already mentioned some of the relative shortcomings, part of which have to do with the purpose of the design here which was to accommodate two other staff staff. Consequently, 126 is too peripheral. 107-108 are too small. There is no 'lab office' in this plan, though 121 would substitute for it. There ought to be better cloakroom facilities. And I hope the whole department will have a suitable place (or places) where, e.g., the students can have lunches or coffee breaks without disturbing the lab. routine. There is not an adequate storeroom facility or shop on the plan; these would be met (less satisfactorily) by some space in the basement below. Room 123 is not so well arranged; we were constrained by having to put the hoods along the para-corridor spaces.

I very well realize that our space needs are relatively high. I think you also understand the reason for this. If we were closely affiliated (topographically) with another experimental group, e.g., in the Virus Laboratory, we should not need nearly so much as we do to be a self-sustained group. If we are to move along the lines that current investigation is opening up we have to be in a position to do a medium of chemical work, in addition to our basic microbiological facility, and I think it is a sine qua non that we have the flexibility, e.g., to handle more difficult microorganisms than *E. coli*, such as HeLa Cells. We will still be lacking a number of things, e.g. a plant for growing and harvesting medium bulk cultures (20-50 gallon scale), for which we may still reasonably rely upon our colleagues in other departments.

And of course, all of our efforts are concentrated in the laboratory, and we do not use crop acreage, greenhouse space, or field exploration. I am sure you are very well aware of all this, but you might have use of an explicit justification. We will still have to rely on cooperative facilities, e.g. for animal care, as that comes up.

I am enclosing a memorandum which comprises one of my initial calculations for space requirements. It was already trimmed more than once. Let me know posthaste what else I can do.

As ever,


Joshua Lederberg

Postscript:

I've since spent several hours going over the Mulford Plans, with the following conclusions.

Browne's plan, dated 1-7-58, has some clever arrangements, but no matter how I try to accommodate it, it comes out rather unsatisfactorily for my particular work needs. The thought of an internal corridor speaks for the desirability of the isolation of our internal traffic, but it is at best wasteful, and with the bottleneck at the stairwell (Rm 334), and the whole length of the string of rooms (122 feet) I cannot become enthusiastic about it. While we need some smaller rooms, there are too many shallow ones north of the internal corridor. Before going much further along this line, I would ask you about the practicality of assigning some of the odd-numbered rooms south of the corridor in lieu of 338 and 340 (which are beyond the bottleneck).

In fact, after some manipulation of the space, I see another scheme which looks several orders of magnitude better from the start. I refer to the 'East End', roughly rooms 356, 238, 356a, 360a, 360, 357, 351 353, 349 and just possibly (depending on how the detailed plan works out) 347 and 343. I think my preliminary proposal will be clearer if you look at the enclosed sketches, E1-E3. The following premises obtain:

EastEnd Plan: 1) Access between 360 and 360c is necessary, at most, on an emergency basis.

2) The men's room 356-356a can be deleted or moved. (Will the density of occupancy justify more than 312?) In any case, this seems a trivial priority over a choice area.

3) The outlet from the eastmost staircase can be shifted to open on to the E-W corridor, just E of the elevator shaft. The present outlet could be retained, but it would be wasteful.

4) The N-S corridor, such as it is, would be shifted to the E of the pillars, leaving space to the W for 2 or 3 rooms about 11-12 feet deep. I have to see more careful drawings than my 30'-1" 3d floor plan to judge whether the existing partition along the pillars could be used as the W wall of the new corridor.

5) Just as a query: if the stairway terminates at this floor, is the space outlined in green the available for extension of a room?

Of course, I looked over the West wing with the same view, but the distal staircase there makes the scheme impractical, and at that, we would have to plan an even more drastic rebuilding.

This plan gives a space somewhat comparable to the cul-de-sac in Giannini, if anything less awkward (no odd angles!). For a group of our size and character of daily operation, I am convinced we need a private traffic lane, and by this scheme, we can make the corridor do multiple duty. We also arrive at an approximation to a peripheral arrangement around a central ~~xxx~~ traffic area, with obvious advantages.

This is, of course, an utterly blind proposal with respect to the other plans of the department. I am most anxious to know what your procedure is on that, and what your present conclusions are. Do not think that because we find it advantageous to make a more or less self-contained unit that we want to isolate ourselves in any sense: I am sure that you were the more pleased with the Mulford plan for its bringing the department together on one floor. We will have to discuss the details of this when we get together personally, but I hope you will fill me in on your thoughts as to the allocation of the other activities in the dept. Meanwhile, I do hope there is nothing impossible about the scheme just summarized.

I am anxious to go ahead with a more detailed plan for the area outlined, but I had better wait until I get your reassurance that there is no irremovable obstacle. It should not be necessary to wait for formal clearance-- I'll just rely on your judgment whether it is worthwhile to spend the time on this lead. I would also urgently need a more detailed plan, say at 8'-1" of the existing construction in that wing, if that can possibly be obtained.

Your cost estimates are fabulous! They are running about three times as high as what the medical school is paying for new construction (omitting land cost of course) of the same sort. But that is hardly an item we can afford to be conservative about here!

A few phone calls might clear up a whole lot. I'll make it a point to have the Mulford plans at home evenings, and you could reach me there, station to station, at CEdar-3-2968 just about any day at 6:30 PM CST (4:30 your time, of course, so that should be reasonably convenient for both of us.) If you want to give a few days notice by letter, ok too, since the main advantage is give-and-take, not speed.

If I can get another copy, I'll send some draft plans for the Medical Genetics Department, to give you an idea of one layout. I think there will be enough delays before the final final plans are activated here that no one will be stung, but this is one point that obviously calls for delicacy and judgment of timing.

JL